AUTHOR INDEX

ANDERSON Stephen J., MULLEN Kathy T. & HESS Robert F. Human peripheral spatial resolution for achromatic and chromatic stimuli: limits imposed by optical and retinal factors. 47

ARHEDEN Håkan & HELLSTRAND Per Force response to rapid length change during contraction and rigor in skinned smooth muscle of guinea-pig taenia coli. 601

BADER C.R. *see* SCHLICHTER R., BADER C.R. & BERNHEIM L. Development of anomalous rectification (I_h) and of a tetrodotoxin-resistant sodium current in embryonic quail neurones. 127

BANKS R.W. The distribution of static γ-axons in the tenuissimus muscle of the cat. 489

BAYLOR D.A. *see* MAKINO C.L., TAYLOR W.R. & BAYLOR D.A. Rapid charge movements and photosensitivity of visual pigments in salamander rods and cones. 761

BELAN P.V. *see* GYŐRI J., KISS T., SHCHERBATKO A.D., BELAN P.V., TEPIKIN A.V., OSIPENKO O.N. & SALÁNKI J. Effect of Ag^+ on membrane permeability of perfused *Helix pomatia* neurons. 1

BERNE Christian *see* FAGIUS Jan & BERNE Christian Rapid resetting of human baroreflex working range: insights from sympathetic recordings during acute hypoglycaemia. 91

BERNHEIM L. *see* SCHLICHTER R., BADER C.R. & BERNHEIM L. Development of anomalous rectification (I_h) and of a tetrodotoxin-resistant sodium current in embryonic quail neurones. 127

BIELEN F.V., GLITSCH H.G. & VERDONCK F. Dependence of Na^+ pump current on external monovalent cations and membrane potential in rabbit cardiac Purkinje cells. 169

BLANCO C.E. *see* WILLIAMS Bridget A., SMYTH J., BOON A.W., HANSON M.A., KUMAR P. & BLANCO C.E. Development of respiratory chemoreflexes in response to alternations of fractional inspired oxygen in the newborn infant. 81

BOON A.W. *see* WILLIAMS Bridget A., SMYTH J., BOON A.W., HANSON M.A., KUMAR P. & BLANCO C.E. Development of respiratory chemoreflexes in response to alternations of fractional inspired oxygen in the newborn infant. 81

CAMPBELL E.J.M. *see* KEARON M.C., SUMMERS E., JONES N.L., CAMPBELL E.J.M. & KILLIAN K.J. Breathing during prolonged exercise in humans. 477

CHEN J.C.T. & CHESLER M. Extracellular alkalinization evoked by GABA and its relationship to activity-dependent pH shifts in turtle cerebellum. 431

CHESLER M. *see* CHEN J.C.T. & CHESLER M. Extracellular alkalinization evoked by GABA and its relationship to activity-dependent pH shifts in turtle cerebellum. 431

COOPER Keith E. *see* FYDA Doreen M., COOPER Keith E. & VEALE Warren L. Nucleus tractus solitarii lesions alter the metabolic and hyperthermic response to central prostaglandin E_1 in the rat. 337

CSERR Helen F., DEPASQUALE Michael, NICHOLSON Charles, PATLAK Clifford S., PETTIGREW Karen D. & RICE Margaret E. Extracellular volume decreases while cell volume is maintained by ion uptake in rat brain during acute hypernatremia. 277

CYRYS Sabine *see* VON BECKERATH Nicolas, CYRYS Sabine, DISCHNER Anton & DAUT Jürgen Hypoxic vasodilatation in isolated, perfused guinea-pig heart: an analysis of the underlying mechanisms. 297

DAUT Jürgen *see* VON BECKERATH Nicolas, CYRYS Sabine, DISCHNER Anton & DAUT Jürgen Hypoxic vasodilatation in isolated, perfused guinea-pig heart: an analysis of the underlying mechanisms. 297

DEN HERTOG Adriaan *see* HUIZINGA Jan D., FARRAWAY Laura & DEN HERTOG Adriaan Generation of slow-wave-type action potentials in canine colon smooth muscle involves a non-L-type Ca^{2+} conductance. 15

DEN HERTOG Adriaan *see* HUIZINGA Jan D., FARRAWAY Laura & DEN HERTOG Adriaan Effect of voltage and cyclic AMP on frequency of slow-wave-type action potentials in canine colon smooth muscle. 31

DEPASQUALE Michael *see* CSERR Helen F., DEPASQUALE Michael, NICHOLSON Charles, PATLAK Clifford S., PETTIGREW Karen D. & RICE Margaret E. Extracellular volume decreases while cell volume is maintained by ion uptake in rat brain during acute hypernatremia. 277

DISCHNER Anton *see* VON BECKERATH Nicolas, CYRYS Sabine, DISCHNER Anton & DAUT Jürgen Hypoxic vasodilatation in isolated, perfused guinea-pig heart: an analysis of the underlying mechanisms. 297

ELAM Mikael *see* KUNIMOTO Masanari, KIRNÖ Klaus, ELAM Mikael & WALLIN B. Gunnar Neuroeffector characteristics of sweat glands in the human hand activated by regular neural stimuli. 391

FAGIUS Jan & BERNE Christian Rapid resetting of human baroreflex working range: insights from sympathetic recordings during acute hypoglycaemia. 91

FARRAWAY Laura *see* HUIZINGA Jan D., FARRAWAY Laura & DEN HERTOG Adriaan Generation of slow-wave-type action potentials in canine colon smooth muscle involves a non-L-type Ca^{2+} conductance. 15

FARRAWAY Laura *see* HUIZINGA Jan D., FARRAWAY Laura & DEN HERTOG Adriaan Effect of voltage and cyclic AMP on frequency of slow-wave-type action potentials in canine colon smooth muscle. 31

FAY F.S., GRANGER W.C., SHELVIN H.H. & TAYLOR S.R. Effects of putative modulators of relaxation microinjected into intact amphibian smooth muscle cells. 321

FEDIDA David & GILES Wayne R. Regional variations in action potentials and transient outward current in myocytes isolated from rabbit left ventricle. 191

FYDA Doreen M., COOPER Keith E. & VEALE Warren L. Nucleus tractus solitarii lesions alter the metabolic and hyperthermic response to central prostaglandin E_1 in the rat. 337

GANDEVIA S.C. *see* KILBREATH S.L. & GANDEVIA S.C. Independent digit control: failure to partition perceived heaviness of weights lifted by digits of the human hand. 585

GILES Wayne R. *see* FEDIDA David & GILES Wayne R. Regional variations in action potentials and transient outward current in myocytes isolated from rabbit left ventricle. 191

GLITSCH H.G. *see* BIELEN F.V., GLITSCH H.G. & VERDONCK F. Dependence of Na^+ pump current on external monovalent cations and membrane potential in rabbit cardiac Purkinje cells. 169

GOLD Geoffrey H. *see* LOWE Graeme & GOLD Geoffrey H. The spatial distributions of odorant sensitivity and odorant-induced currents in salamander olfactory receptor cells. 147

GOONEWARDENE I.P. & KARIM F. Attenuation of exercise vasodilatation by adenosine deaminase in anaesthetized dogs. 65

GRANGER W.C. *see* FAY F.S., GRANGER W.C., SHELVIN H.H. & TAYLOR S.R. Effects of putative modulators of relaxation microinjected into intact amphibian smooth muscle cells. 321

GYŐRI J., KISS T., SHCHERBATKO A.D., BELAN P.V., TEPIKIN A.V., OSIPENKO O.N. & SALÁNKI J. Effect of Ag^+ on membrane permeability of perfused *Helix pomatia* neurons. 1

HANSON M.A. *see* WILLIAMS Bridget A., SMYTH J., BOON A.W., HANSON M.A., KUMAR P. & BLANCO C.E. Development of respiratory chemoreflexes in response to alternations of fractional inspired oxygen in the newborn infant. 81

HARTELL Nick A. & HEADLEY P. Max The effect of naloxone on spinal reflexes to electrical and mechanical stimuli in the anaesthetized, spinalized rat. 513

HEADLEY P. Max *see* HARTELL Nick A. & HEADLEY P. Max The effect of naloxone on spinal reflexes to electrical and mechanical stimuli in the anaesthetized, spinalized rat. 513

HELLSTRAND Per *see* ARHEDEN Håkan & HELLSTRAND Per Force response to rapid length change during contraction and rigor in skinned smooth muscle of guinea-pig taenia coli. 601

HESS Robert F. *see* ANDERSON Stephen J., MULLEN Kathy T. & HESS Robert F. Human peripheral spatial resolution for achromatic and chromatic stimuli: limits imposed by optical and retinal factors. 47

HIROTA Akihiko *see* KOMURO Hitoshi, SAKAI Tetsuro, MOMOSE-SATO Yoko, HIROTA Akihiko & KAMINO Kohtaro Optical detection of postsynaptic potentials evoked by vagal stimulation in the early embryonic chick brain stem slice. 631

HIROTA Akihiko *see* MOMOSE-SATO Yoko, SAKAI Tetsuro, KOMURO Hitoshi, HIROTA Akihiko & KAMINO Kohtaro Optical mapping of the early development of the response pattern to vagal stimulation in embryonic chick brain stem. 649

HUI Chiu Shuen & MAYLIE James Multiple actions of 2,3-butanedione monoxime on contractile activation in frog twitch fibres. 527

HUI Chiu Shuen *see* MAYLIE James & HUI Chiu Shuen Action of 2,3-butanedione monoxime on calcium signals in frog cut twitch fibres containing Antipyrylazo III. 551

HUIZINGA Jan D., FARRAWAY Laura & DEN HERTOG Adriaan Generation of slow-wave-type action potentials in canine colon smooth muscle involves a non-L-type Ca^{2+} conductance. 15

HUIZINGA Jan D., FARRAWAY Laura & DEN HERTOG Adriaan Effect of voltage and cyclic AMP on frequency of slow-wave-type action potentials in canine colon smooth muscle. 31

IMAIZUMI Yuji *see* MURAKI Katsuhiko, IMAIZUMI Yuji & WATANABE Minoru Sodium currents in smooth muscle cells freshly isolated from stomach fundus of the rat and ureter of the guinea-pig. 351

INOUE Ryuji Effect of external Cd^{2+} and other divalent cations on carbachol-activated non-selective cation channels in guinea-pig ileum. 447

JONES N.L. *see* KEARON M.C., SUMMERS E., JONES N.L., CAMPBELL E.J.M. & KILLIAN K.J. Breathing during prolonged exercise in humans. 477

JOSEPHSON R.K. & STEVENSON R.D. The efficiency of a flight muscle from the locust *Schistocerca americana*. 413

KAMINO Kohtaro *see* KOMURO Hitoshi, SAKAI Tetsuro, MOMOSE-SATO Yoko, HIROTA Akihiko & KAMINO Kohtaro Optical detection of postsynaptic potentials evoked by vagal stimulation in the early embryonic chick brain stem slice. 631

KAMINO Kohtaro *see* MOMOSE-SATO Yoko, SAKAI Tetsuro, KOMURO Hitoshi, HIROTA Akihiko & KAMINO Kohtaro Optical mapping of the early development of the response pattern to vagal stimulation in embryonic chick brain stem. 649

KARIM F. *see* GOONEWARDENE I.P. & KARIM F. Attenuation of exercise vasodilatation by adenosine deaminase in anaesthetized dogs. 65

KEARON M.C., SUMMERS E., JONES N.L., CAMPBELL E.J.M. & KILLIAN K.J. Breathing during prolonged exercise in humans. 477

KILBREATH S.L. & GANDEVIA S.C. Independent digit control: failure to partition perceived heaviness of weights lifted by digits of the human hand. 585

KILLIAN K.J. *see* KEARON M.C., SUMMERS E., JONES N.L., CAMPBELL E.J.M. & KILLIAN K.J. Breathing during prolonged exercise in humans. 477

KIRNÖ Klaus *see* KUNIMOTO Masanari, KIRNÖ Klaus, ELAM Mikael & WALLIN B. Gunnar Neuroeffector characteristics of sweat glands in the human hand activated by regular neural stimuli. 391

KISS T. *see* GYŐRI J., KISS T., SHCHERBATKO A.D., BELAN P.V., TEPIKIN A.V., OSIPENKO O.N. & SALÁNKI J. Effect of Ag^{+} on membrane permeability of perfused *Helix pomatia* neurons. 1

KOMURO Hitoshi, SAKAI Tetsuro, MOMOSE-SATO Yoko, HIROTA Akihiko & KAMINO Kohtaro Optical detection of postsynaptic potentials evoked by vagal stimulation in the early embryonic chick brain stem slice. 631

KOMURO Hitoshi *see* MOMOSE-SATO Yoko, SAKAI Tetsuro, KOMURO Hitoshi, HIROTA Akihiko & KAMINO Kohtaro Optical mapping of the early development of the response pattern to vagal stimulation in embryonic chick brain stem. 649

KUBO Yoshihiro Properties of ionic currents induced by external ATP in a mouse mesodermal stem cell line. 691

KUBO Yoshihiro Electrophysiological and immunohistochemical analysis of muscle differentiation in a mouse mesodermal stem cell line. 711

KUBO Yoshihiro Comparison of initial stages of muscle differentiation in rat and mouse myoblastic and mouse mesodermal stem cell lines. 743

KUMAR P. *see* WILLIAMS Bridget A., SMYTH J., BOON A.W., HANSON M.A., KUMAR P. & BLANCO C.E. Development of respiratory chemoreflexes in response to alternations of fractional inspired oxygen in the newborn infant. 81

KUNIMOTO Masanari, KIRNÖ Klaus, ELAM Mikael & WALLIN B. Gunnar Neuroeffector characteristics of sweat glands in the human hand activated by regular neural stimuli. 391

LOWE Graeme & GOLD Geoffrey H. The spatial distributions of odorant sensitivity and odorant-induced currents in salamander olfactory receptor cells. 147

MCCORMICK David A. & WANG Zhong Serotonin and noradrenaline excite GABAergic neurones of the guinea-pig and cat nucleus reticularis thalami. 235

MCMILLEN I.C. & WALKER D.W. Effects of different lighting regimes on daily hormonal and behavioural rhythms in the pregnant ewe and sheep fetus. 465

MAKINO C.L., TAYLOR W.R. & BAYLOR D.A. Rapid charge movements and photosensitivity of visual pigments in salamander rods and cones. 761

MANGEL Stuart C. Analysis of the horizontal cell contribution to the receptive field surround of ganglion cells in the rabbit retina. 211

MAYLIE James *see* HUI Chiu Shuen & MAYLIE James Multiple actions of 2,3-butanedione monoxime on contractile activation in frog twitch fibres. 527

MAYLIE James & HUI Chiu Shuen Action of 2,3-butanedione monoxime on calcium signals in frog cut twitch fibres containing Antipyrylazo III. 551

MOMOSE-SATO Yoko *see* KOMURO Hitoshi, SAKAI Tetsuro, MOMOSE-SATO Yoko, HIROTA Akihiko & KAMINO Kohtaro Optical detection of postsynaptic potentials evoked by vagal stimulation in the early embryonic chick brain stem slice. 631

MOMOSE-SATO Yoko, SAKAI Tetsuro, KOMURO Hitoshi, HIROTA Akihiko & KAMINO Kohtaro Optical mapping of the early development of the response pattern to vagal stimulation in embryonic chick brain stem. 649

MULLEN Kathy T. *see* ANDERSON Stephen J., MULLEN Kathy T. & HESS Robert F. Human peripheral spatial resolution for achromatic and chromatic stimuli: limits imposed by optical and retinal factors. 47

MURAKI Katsuhiko, IMAIZUMI Yuji & WATANABE Minoru Sodium currents in smooth muscle cells freshly isolated from stomach fundus of the rat and ureter of the guinea-pig. 351

NICHOLSON Charles *see* CSERR Helen F., DEPASQUALE Michael, NICHOLSON Charles, PATLAK Clifford S., PETTIGREW Karen D. & RICE Margaret E. Extracellular volume decreases while cell volume is maintained by ion uptake in rat brain during acute hypernatremia. 277

NOMA A., SHIOYA T., PAVER L.F.C., TWIST V.W. & POWELL T. Cystolic free Ca^{2+} during operation of sodium–calcium exchange in guinea-pig heart cells. 257

OHMORI Harunori *see* SHIGEMOTO Takashi & OHMORI Harunori Muscarinic receptor hyperpolarizes cochlear hair cells of chick by activating Ca^{2+}-activated K^+ channels. 669

OSIPENKO O.N. *see* GYŐRI J., KISS T., SHCHERBATKO A.D., BELAN P.V., TEPIKIN A.V., OSIPENKO O.N. & SALÁNKI J. Effect of Ag^+ on membrane permeability of perfused *Helix pomatia* neurons. 1

PATLAK Clifford S. *see* CSERR Helen F., DEPASQUALE Michael, NICHOLSON Charles, PATLAK Clifford S., PETTIGREW Karen D. & RICE Margaret E. Extracellular volume decreases while cell volume is maintained by ion uptake in rat brain during acute hypernatremia. 277

PAVER L.F.C. *see* NOMA A., SHIOYA T., PAVER L.F.C., TWIST V.W. & POWELL T. Cystolic free Ca^{2+} during operation of sodium–calcium exchange in guinea-pig heart cells. 257

PETTIGREW Karen D. *see* CSERR Helen F., DEPASQUALE Michael, NICHOLSON Charles, PATLAK Clifford S., PETTIGREW Karen D. & RICE Margaret E. Extracellular volume decreases while cell volume is maintained by ion uptake in rat brain during acute hypernatremia. 277

POWELL T. *see* NOMA A., SHIOYA T., PAVER L.F.C., TWIST V.W. & POWELL T. Cystolic free Ca^{2+} during operation of sodium–calcium exchange in guinea-pig heart cells. 257

RICE Margaret E. *see* CSERR Helen F., DEPASQUALE Michael, NICHOLSON Charles, PATLAK Clifford S., PETTIGREW Karen D. & RICE Margaret E. Extracellular volume decreases while cell volume is maintained by ion uptake in rat brain during acute hypernatremia. 277

ROTHMAN Steven M. *see* YOON Kong-Woo & ROTHMAN Steven M. The modulation of rat hippocampal synaptic conductances by baclofen and γ-aminobutyric acid. 377

SAKAI Tetsuro *see* KOMURO Hitoshi, SAKAI Tetsuro, MOMOSE-SATO Yoko, HIROTA Akihiko & KAMINO Kohtaro Optical detection of postsynaptic potentials evoked by vagal stimulation in the early embryonic chick brain stem slice. 631

SAKAI Tetsuro *see* MOMOSE-SATO Yoko, SAKAI Tetsuro, KOMURO Hitoshi, HIROTA Akihiko & KAMINO Kohtaro Optical mapping of the early development of the response pattern to vagal stimulation in embryonic chick brain stem. 649

SALÁNKI J. *see* GYŐRI J., KISS T., SHCHERBATKO A.D., BELAN P.V., TEPIKIN A.V., OSIPENKO O.N. & SALÁNKI J. Effect of Ag^+ on membrane permeability of perfused *Helix pomatia* neurons. 1

SCHLICHTER R., BADER C.R. & BERNHEIM L. Development of anomalous rectification (I_h) and of a tetrodotoxin-resistant sodium current in embryonic quail neurones. 127

SCHMIDT P.F., SCHOMBURG E.D. & STEFFENS H. Limitedly selective action of a δ-agonistic leu-enkephalin on the transmission in spinal motor reflex pathways in cats. 103

SCHOMBURG E.D. *see* SCHMIDT P.F., SCHOMBURG E.D. & STEFFENS H. Limitedly selective action of a δ-agonistic leu-enkephalin on the transmission in spinal motor reflex pathways in cats. 103

SHCHERBATKO A.D. *see* GYŐRI J., KISS T., SHCHERBATKO A.D., BELAN P.V., TEPIKIN A.V., OSIPENKO O.N. & SALÁNKI J. Effect of Ag^+ on membrane permeability of perfused *Helix pomatia* neurons. 1

SHELVIN H.H. *see* FAY F.S., GRANGER W.C., SHELVIN H.H. & TAYLOR S.R. Effects of putative modulators of relaxation microinjected into intact amphibian smooth muscle cells. 321

SHIGEMOTO Takashi & OHMORI Harunori Muscarinic receptor hyperpolarizes cochlear hair cells of chick by activating Ca^{2+}-activated K^+ channels. 669

SHIOYA T. *see* NOMA A., SHIOYA T., PAVER L.F.C., TWIST V.W. & POWELL T. Cystolic free Ca^{2+} during operation of sodium–calcium exchange in guinea-pig heart cells. 257

SIRS John A. The flow of human blood through capillary tubes. 569

SMYTH J. *see* WILLIAMS Bridget A., SMYTH J., BOON A.W., HANSON M.A., KUMAR P. & BLANCO C.E. Development of respiratory chemoreflexes in response to alternations of fractional inspired oxygen in the newborn infant. 81

STEFFENS H. *see* SCHMIDT P.F., SCHOMBURG E.D. & STEFFENS H. Limitedly selective action of a δ-agonistic leu-enkephalin on the transmission in spinal motor reflex pathways in cats. 103

STEVENSON R.D. *see* JOSEPHSON R.K. & STEVENSON R.D. The efficiency of a flight muscle from the locust *Schistocerca americana*. 413

SUMMERS E. *see* KEARON M.C., SUMMERS E., JONES N.L., CAMPBELL E.J.M. & KILLIAN K.J. Breathing during prolonged exercise in humans. 477

TAYLOR S.R. *see* FAY F.S., GRANGER W.C., SHELVIN H.H. & TAYLOR S.R. Effects of putative modulators of relaxation microinjected into intact amphibian smooth muscle cells. 321

TAYLOR W.R. *see* MAKINO C.L., TAYLOR W.R. & BAYLOR D.A. Rapid charge movements and photosensitivity of visual pigments in salamander rods and cones. 761

TEPIKIN A.V. *see* GYŐRI J., KISS T., SHCHERBATKO A.D., BELAN P.V., TEPIKIN A.V., OSIPENKO O.N. & SALÁNKI J. Effect of Ag^+ on membrane permeability of perfused *Helix pomatia* neurons. 1

TWIST V.W. *see* NOMA A., SHIOYA T., PAVER L.F.C., TWIST V.W. & POWELL T. Cystolic free Ca^{2+} during operation of sodium–calcium exchange in guinea-pig heart cells. 257

VEALE Warren L. *see* FYDA Doreen M., COOPER Keith E. & VEALE Warren L. Nucleus tractus solitarii lesions alter the metabolic and hyperthermic response to central prostaglandin E_1 in the rat. 337

VERDONCK F. *see* BIELEN F.V., GLITSCH H.G. & VERDONCK F. Dependence of Na^+ pump current on external monovalent cations and membrane potential in rabbit cardiac Purkinje cells. 169

VON BECKERATH Nicolas, CYRYS Sabine, DISCHNER Anton & DAUT Jürgen Hypoxic vasodilatation in isolated, perfused guinea-pig heart: an analysis of the underlying mechanisms. 297

WALKER D.W. *see* MCMILLEN I.C. & WALKER D.W. Effects of different lighting regimes on daily hormonal and behavioural rhythms in the pregnant ewe and sheep fetus. 465

WALLIN B. Gunnar *see* KUNIMOTO Masanari, KIRNÖ Klaus, ELAM Mikael & WALLIN B. Gunnar Neuroeffector characteristics of sweat glands in the human hand activated by regular neural stimuli. 391

WANG Zhong *see* MCCORMICK David A. & WANG Zhong Serotonin and noradrenaline excite GABAergic neurones of the guinea-pig and cat nucleus reticularis thalami. 235

WATANABE Minoru *see* MURAKI Katsuhiko, IMAIZUMI Yuji & WATANABE Minoru Sodium currents in smooth muscle cells freshly isolated from stomach fundus of the rat and ureter of the guinea-pig. 351

WILLIAMS Bridget A., SMYTH J., BOON A.W., HANSON M.A., KUMAR P. & BLANCO C.E. Development of respiratory chemoreflexes in response to alternations of fractional inspired oxygen in the newborn infant. 81

YOON Kong-Woo & ROTHMAN Steven M. The modulation of rat hippocampal synaptic conductances by baclofen and γ-aminobutyric acid. 377